



IFW

**PATENT APPLICATION
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of

Docket No: A8700

Lawrence SHAH, et al.

Appln. No.: 10/813,269

Group Art Unit: 2828

Confirmation No.: 5356

Examiner: Not yet assigned

Filed: March 31, 2004

For: FEMTOSECOND LASER PROCESSING SYSTEM WITH PROCESS PARAMETERS
CONTROLS AND FEEDBACK

INFORMATION DISCLOSURE STATEMENT
UNDER 37 C.F.R. §§ 1.97 and 1.98

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In accordance with the duty of disclosure under 37 C.F.R. § 1.56, Applicant hereby notifies the U.S. Patent and Trademark Office of the documents which are listed on the attached PTO/SB/08 A & B (modified) form and/or listed herein and which the Examiner may deem material to patentability of the claims of the above-identified application.

One copy of each of the listed documents, other than any U.S. patents and patent publications, is submitted herewith.

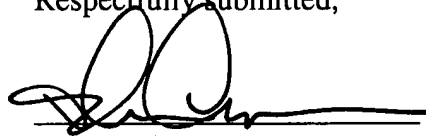
The present Information Disclosure Statement is being filed: (1) No later than three months from the application's filing date; (2) Before the mailing date of the first Office Action on the merits (whichever is later); or (3) Before the mailing date of the first Office Action after

filing a request for continued examination (RCE) under §1.114, and therefore, no Statement under 37 C.F.R. § 1.97(e) or fee under 37 C.F.R. § 1.17(p) is required.

The submission of the listed documents is not intended as an admission that any such document constitutes prior art against the claims of the present application. Applicant does not waive any right to take any action that would be appropriate to antedate or otherwise remove any listed document as a competent reference against the claims of the present application.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account. A duplicate copy of this paper is attached.

Respectfully submitted,



Richard C. Turner
Registration No. 29,710

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE

23373

CUSTOMER NUMBER

Date: June 30, 2004

Substitute for Form 1449 A & B/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Complete if Known

Application Number	10/813,269
Confirmation Number	5356
Filing Date	March 31, 2004
First Named Inventor	Lawrence SHAH
Art Unit	2828
Examiner Name	Not yet assigned
Attorney Docket Number	A8700

Sheet	1	of	4
-------	---	----	---

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document
		Number	Kind Code ² (if known)		
		US 5,720,894	A	02-24-1998	Neev et al.
		US 5,978,538	A	11-02-1999	Miura et al.
		US 6,146,375	A	11-14-2000	Juhasz et al.
		US 6,268,586	B1	07-31-2001	Stuart et al.
		US 6,285,002	B1	09-04-2001	Ngoi et al.
		US 6,312,768	B1	11-06-2001	Rode et al.
		US 6,333,485	B1	12-25-2001	Haight et al.
		US 6,392,683	B1	05-21-2002	Hayashi
		US 6,407,361	B1	06-18-2002	Williams

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Translation ⁶
		Country Code ³	Number ⁴	Kind Code ⁵ (if known)			

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city, and/or country where published.	Translation ⁶
		Manufacturing of High Quality Integrated Optical Components by Laser Direct-Write (M103) Ph. Bado, A. A. Said, Mark Dugan, Translume, 755 Phoenix Drive, Ann Arbor, Michigan 48108	
		A Study of the Effect of Weld Parameters on Strengths of Clearwelded TM Thermoplastics (602) Nicole M. Woosman and Michelle M. Burrell Gentex Corporation Carbondale, Pennsylvania, USA	
		Writing of permanent birefringent microlayers in bulk fused silica with femtosecond laser pulses L. Sudrie, M. Franco, B. Prade, A. Mysyrowicz* Received 9 August 1999; accepted 22 September 1999	
		Burst-mode femtosecond ablation in Copper and Lexan Craig W. Siders, Martin Richardson, Nikolai Vorobiev, Ty Ohlmstead, Rob Bernath, and Tina Shih The School of Optics/CREOL, University of Central Florida, Orlando Florida 32816-2700	
		Femtosecond Laser Fabricated Nanostructures in Silica Glass R.S. Taylor, C. Hnatovsky, E. Simova, Institute for Microstructural Sciences, National Research Council; D.M. Rayner, V. R. Bhardwaj and P.B. Corkum Steacie Institute for Molecular Sciences, National Research Council	
		Femtosecond laser ablation of silicon-modification thresholds and morphology J. Bonse", S. Baudach, J. Kruger, W. Kautek, M. Lenzner Laboratory for Thin Film Technology, Federal Institute for Materials Research and Testing (BAM), Unter den Eichen 87, 12205 Berlin Germany, Received 4 Dec. 2000/Revised version: 29 March 2001/Published online: 20 June 2001 - © Springer-Verlag 2001	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kind Codes of USPTO Patent Documents at www.uspto.gov, MPEP 901.04 or in the comment box of this document. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST. 3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to indicate here if English language Translation is attached.

Substitute for Form 1449 A & B/PTO <u>INFORMATION DISCLOSURE</u> <u>STATEMENT BY APPLICANT</u> <i>(use as many sheets as necessary)</i>				<i>Complete if Known</i>	
				Application Number	10/813,269
				Confirmation Number	5356
				Filing Date	March 31, 2004
				First Named Inventor	Lawrence SHAH
				Art Unit	2828
				Examiner Name	Not yet assigned
Sheet	2	of	4	Attorney Docket Number	A8700

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document
		Number	Kind Code ² (if known)		
		US 6,421,573	B1	07-16-2002	Kfka et al.
		US 6,552,301	B2	04-22-2003	Herman et al.
		US 6,573,026	B1	06-03-2003	Aitken et al.
		US 6,574,250	B2	06/03/2003	Sun et al
		US 2003/0035640	A1	02/20/2003	Dugan et al
		US 2003/0099452	A1	05/29/2003	Borrelli et al
		US 2003/0110810	A1	06/19/2003	Dunn et al
		US 2002/0076655	A1	06/20/2002	Borrelli et al
		US 2002/0193704	A1	12/19/2002	Goldstein et al

FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No. ¹	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Translation ⁶
		Country Code ³	Number ⁴	Kind Code ⁵ (if known)			

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city, and/or country where published.	Translation ⁶
		Femtosecond writing of active optical waveguides with astigmatically shaped beams Roberto Osellame, Stefano Taccheo, Marco Marangoni, Roberta Ramponi, and Paolo Laporta, Dario Polli, Sandro De Silvestri, and Giulio Cerullo, Received November 19, 2002; revised manuscript received February 7, 2003	
		Laser Welding of Plastics - Process Selection Software (601) Ian Jones and Sam Rostami Polymer Group, TWI, Cambridge UK	
		Proceedings of the International Tribology Conference Nagasaki, 2000 MICROTTEXTURING OF FUNCTIONAL SURFACES FOR IMPROVING THEIR TRIBOLOGICAL PERFORMANCE Henry HAEFKE, Yvonne GERBIG, Gabriel DUMITRU and Valerio ROMANO	
		New low temperature femto-second laser annealing method for TFT fabrication technology Alexei K. Zaitsev, Yi-Chao Wang and Ci-Ling Pan; Jia-Min Shieh	
		Processing of multi-layer systems using femtosecond, picosecond, and nanosecond laser pulses at different wavelengths David Ashkenasi*, Arkadi Rosenfeld** Laser-und Medizin-Technologie GmbH Berlin, Germany; Max Born Berlin, Germany	
		Ripples revisited: non-classical morphology at the bottom of femtosecond laser ablation craters in transparent dielectrics Jurgen Reif*, Florenta Costache, Matthias Henyk, Stanislav V. Pandelov	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²See Kind Codes of USPTO Patent Documents at www.uspto.gov, MPEP 901.04 or in the comment box of this document. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST. 3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to indicate here if English language Translation is attached.

Substitute for Form 1449 A & B/PTO <u>INFORMATION DISCLOSURE</u> <u>STATEMENT BY APPLICANT</u> (use as many sheets as necessary)				<i>Complete if Known</i>	
				Application Number	10/813,269
				Confirmation Number	5356
				Filing Date	March 31, 2004
				First Named Inventor	Lawrence SHAH
				Art Unit	2828
				Examiner Name	Not yet assigned
Sheet	3	of	4	Attorney Docket Number	A8700

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document
		Number	Kind Code ² (if known)		
		US RE37,585	E	03/19/2002	Mourou et al
		US 6,372,103	B1	04/16/2002	Perry et al
		US 6,414,320	B1	07/02/2002	Ishikawa et al
		US 6,341,009	B1	01/22/2002	O'Connor et al
		US			
		US			
		US			
		US			
		US			

FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No. ¹	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Translation ⁶
		Country Code ³	Number ⁴	Kind Code ⁵ (if known)			

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city, and/or country where published.	Translation ⁶
		CW11 Self-organized form birefringence in glass irradiated by intense ultrashort light pulses P.G. Kazansky, J. Mills, E. Bricchi, J.J. Baumberg, J. Qiu and K. Hirao	
		CFF2 Single-pulse and 'pulsetrain-burst' (>100 MHz) effects in ultrafast laser processing of metals, glasses, and bio-tissues Santiago Camacho-Lopez, Rodger Evans, Catherine Greenhalgh, Cristian Torti, John Robertson, Robin Marjoribanks, Peter Herman, Marc Nantel, Lothar Lilge	
		Proc. SPIE Vol. 4274 STRUCTURING SILICON WITH FEMTOSECOND LASERS H.K. Tonshoff, A. Ostendorf, T. Wagner Laser Zentrum Hannover e. V. (www.lzh.de), Hollerithallee 8, D-30419 Hannover, Germany	
		Optics Communications 191 (2001) 333-339 Study of damage in fused silica induced by ultra-short IR laser pulses L. Sudrie, M. Franco, B. Prade, A. Mysyrowicz* Received 15 January 2001; accepted 28 February 2001	
		Applied Physics Letters, Volume 82, Number 17, 28 April 2003, Surface nanostructuring of borosilicate glass by femtosecond nJ energy pulses	
		Ultra-fast laser-induced processing of materials: fundamentals and applications in micromachining Tae Y. Choi, Anant Chimmalgi and Constantine P. Grigoropoulos Department of Mechanical Engineering, University of California, Berkeley	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²See Kind Codes of USPTO Patent Documents at www.uspto.gov, MPEP 901.04 or in the comment box of this document. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST. 3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to indicate here if English language Translation is attached.

Substitute for Form 1449 A & B/PTO <u>INFORMATION DISCLOSURE</u> <u>STATEMENT BY APPLICANT</u> (use as many sheets as necessary)				<i>Complete if Known</i>	
				Application Number	10/813,269
				Confirmation Number	5356
				Filing Date	March 31, 2004
				First Named Inventor	Lawrence SHAH
				Art Unit	2828
				Examiner Name	Not yet assigned
Sheet	4	of	4	Attorney Docket Number	A8700

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document
		Number	Kind Code ² (if known)		
		US			
		US			
		US			
		US			
		US			
		US			
		US			
		US			
		US			

FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No. ¹	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Translation ⁶
		Country Code ³	Number ⁴	Kind Code ⁵ (if known)			

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city, and/or country where published.	Translation ⁶
		Ultrafast pulse train micromachining Ihtesham H. Chowdhury, Xianfan Xu, Andrew M. Weiner, School of Mech. Engg., Purdue Univ., W. Lafayette, IN, USA 47907-1288 School of Elec. and Comp. Engg., Purdue Univ., W. Lafayette, IN, USA 47907-1285	
		Ultra-High Resolution Index of Refraction Profiles of Femtosecond Laser Modified Silica Structures, R.S. Taylor, C. Hnatovsky, E. Simova, D.M. Rayner, V.R. Bhardwaj and P.B. Corkum Abstract: Ultra-high spatial resolution index of refraction profiles of femtosecond laser modified structures in silica glass...	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²See Kind Codes of USPTO Patent Documents at www.uspto.gov, MPEP 901.04 or in the comment box of this document. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST. 3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to indicate here if English language Translation is attached.